

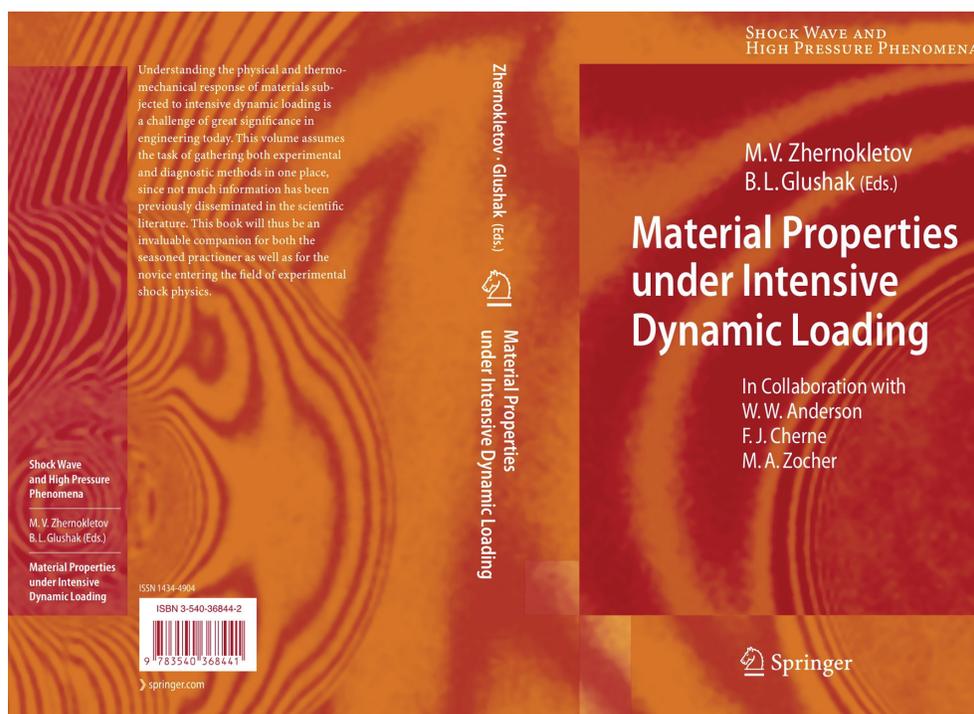
Publication of the Monograph Entitled “Methods for Study of Substance Properties Under Intense Dynamic Loading”

Principal Investigators: William W. Anderson (LANL), and Mikhail V. Zhernokletov (VNIIEF)

Project Description

Despite the high quality of the work being conducted under the US/Russian Science and Technology collaborations, the product of that work will inevitably be underutilized unless it is disseminated to the broader scientific community. In response to this realization, and with the objective of maximizing the benefit of the collaboration, the researchers involved in these collaborations often publish their work. This particular project has resulted in the publication (by Springer-Verlag) of an extensive (over 400 pages) book on the topic of shock physics.

The first line of the preface reads, “This book is the result of collaboration between the Russian Federal Nuclear Center – All Russian Scientific Research Institute of Experimental Physics (RFNC-VNIIEF) located in Sarov, Russia, and the University of California—Los Alamos National Laboratory (UC-LANL).” An excerpt from the preface that appears on the book cover reads, “Understanding the physical and thermomechanical response of materials subjected to intensive dynamic loading is a challenge of great significance in engineering today. This volume assumes the task of gathering both experimental and diagnostic methods in one place, since not much information has been previously disseminated in the scientific literature. This book will thus be an invaluable companion for both the seasoned practitioner as well as for the novice entering the field of experimental shock physics.”



Technical Purpose and Benefits

The NNSA and LANL have an obligation to the country to maximize the benefit gained from the US/Russian Science and Technology collaborations. One key factor in achieving maximal benefit is the dissemination of the product of the collaborations to the broader scientific community. This major publication supports this objective.



Discussions in Moscow – Left to right: Dr. Frank J. Cherne III, Dr. Mikhail V. Zhernokletov, and Dr. Olga Tyupanova.



Collaboration between Los Alamos National Laboratory (LANL), Los Alamos, NM, USA, and the Russian Federal Nuclear Center – All Russian Research Institute of Experimental Physics (RFNC-VNIIEF), Sarov, Russia

